

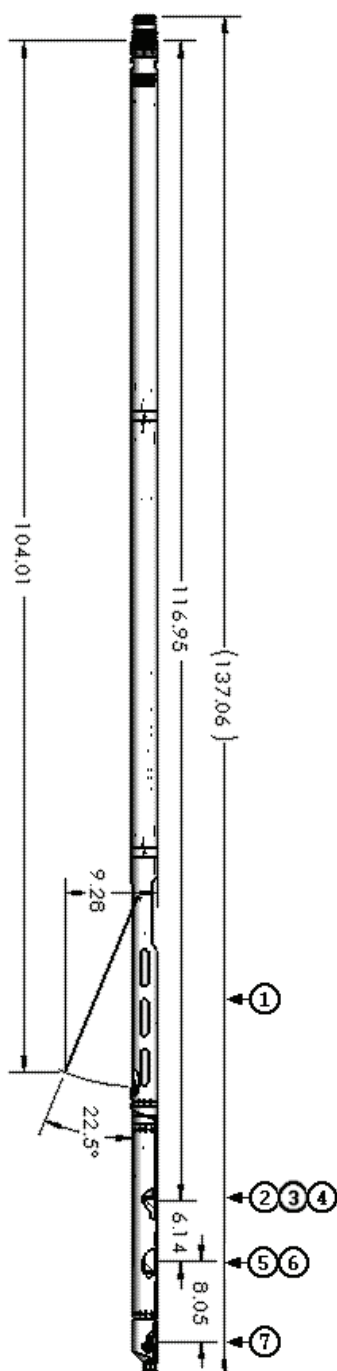


5.3 4239 Stacked Series Photoelectric Density Tool Sub

The 4239 Stacked Photoelectric Density Tool Sub uses two focused density detectors to compute borehole compensated density real time while logging. It also measures the amplitude of the returning gamma pulses using a photoelectric reader in order to determine lithology directly. It can distinguish between sandstone, limestone, dolomite, shale, and other rocks in the form of an additional logging curve. It also records caliper readings. It must be run with the 4000 Stack Gamma Ray Tool Sub, which provides the needed telemetry, and is compatible with the 4175 Stack Neutron Tool Sub.

Tool Specifications

Length: 348.13cm
 Temperature: 85°C
 Diameter: 63.5mm
 Pressure: 175kg/cm²
 Weight: 58kg
 Logging Speed: 9m/min.



Sensor	Response Limits	Accuracy
Photoelectric (PE)	0 10 barns/electron	+/- 0-5%
Short Arm Caliper	to 35.6cm	+/- 0.635 cm
Near Density	05 to 3.5g/cc	+/- 0.05g/cc
Far Density	05 to 3.5g/cc	+/- 0.05g/cc
Compensated Density	05 to 3.5g/cc	+/- 0.05g/cc

Features

1. Caliper: Motorized, uphole actuated 33.02 cm
2. Far Density: 35.8 cm spacing
3. Compensated Density: CDL (compensated density log)
4. Compensation
5. Near Density: 220 cm spacing
6. Photoelectric: 20 cm spacing
7. Radioactive Source: 200 300 mCi Cesium 137 bullplug